IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of: Jim McWhir et al.

For:

SELECTIVE ANTIBODY TARGETING OF UNDIFFERENTIATED STEM CELLS

INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 CFR § 1.98(d)

Commissioner for Patent Alexandria, VA 22313

Dear Sir:

The information listed in the accompanying form PTO-1449 may be material to examination of this application and are submitted in compliance with the duty of disclosure under 37 CFR § 1.56. The Examiner is requested to make this information of record in the application.

Copies of the information are not provided herewith, but were previously filed in parent application 09/995,419, to which this application claims priority under 35 USC § 120. The Examiner is respectfully directed to the file for application 09/995,419 to access the information listed on the accompanying form PTO-1449. This is in compliance with the provisions of 37 CFR § 1.98(d).

This Information Disclosure Statement is not to be construed as a representation that a full search for relevant information has been made, or that the information listed on the accompanying PTO-1449 is material to patentability of the claimed invention under 37 CFR § 1.56(b).

J. Michael Schiff

Registration No. 40,253

GERON CORPORATION 230 Constitution Drive Menlo Park, CA 94025 *Telephone:* (650) 473-7715

Fax: (650) 473-8654

March 26, 2004

Form 1449 (modified)

Information Disclosure
Statement By Applicant

Title: Selected Antibody Targeting of Undifferentiated Stem Cells
Inventors: McWhir, et al.

Filing Date: March 26, 2004

Group:

U.S. Patent Documents

| Examiner Initial | Ref. | Patent No. | Filing Date | Issue Date | Class/ Subclass | Inventors: | Title: |
|---------------------|------|---------------|----------------|---------------|--------------------|-------------------|---|
| | А | 4,959,313 | Jun 22/87 | Sep 25/90 | 435/69.1 | Taketo | Cellular enhancer for expressing genes in undifferentiated stem cells |
| | В | 5,068,191 | Aug 31/89 | Nov 26/91 | 435/193 | Clausen, et al. | Purified Histo-Blood Group A Clycosyltranferase and Antibodies Thereto |
| · | С | 5,082,670 | 424/520 | Jan 21/92 | 424/520 | Gage, et al. | Method of grafting genetically modified cells to treat defects, disease or damage or the central nervous system |
| | D | 5,326,857 | Aug 29/91 | Jul 5/94 | 536/23.2 | Yamamoto, et al. | ABO Genotyping |
| | Е | 5,639,618 | May 13/94 | Jun 17/97 | 435/7.21 | Gay | Method of isolating a lineage specific stem cell in vitro |
| | F | 5,672,499 | Jun 7/95 | Sep 30/97 | 435/240.4 | Anderson, et al. | Immortalized Neural Crest Stem Cells and Methods of Making |
| | G | 5,716,411 | Feb 6/96 | Feb 10/98 | 623/15 | Orgill, et al. | Method of skin regeneration using a collagen-glycosaminoglycan matrix and cultured epithelial autograft |
| | Н | 5,736,396 | Jan 24/95 | Apr 7/98 | 435/366 | Bruder, et al. | Lineage-directed induction of human mesenchymal stem cell differentiation |
| | 1 | 5,750,397 | Jun 6/95 | May 12/98 | 435/372 | Tsukamoto, et al. | Human hematopoietic stem cell |
| | J | 5,766,948 | Nov 3/93 | Jun 16/98 | 435/368 | Gage, et al. | Method for Production of Neuroblasts |
| | К | 5,851,832 | Jun 7/95 | Dec 22/98 | 435/368 | Weiss, et al. | In vitro growth and proliferation of multipotent heural stem cells and their progeny |
| | L | 5,843,780 | Jan 18/96 | Dec 1/98 | 435/363 | Thomson | Primate embryonic stem cells |
| | М | 5,968,829 | Sep 5/97 | Oct 19/99 | 435/467 | Carpenter | Human CNS neural stem cells |
| | Z | 6,015,671 | Nov 21/97 | Jan 18/00 | 435/6 | Field | Myocardial Grafts and Cellular Compositions |
| | 0 | 6,087,168 | Jan 20/99 | Jul 11/00 | 435/345 | Levesque, et al. | Conversion of non-nueronal cells into neurons: transdifferentiation of epidermal cells |
| | Р | 6,090,622 | Mar 31/97 | Jul 18/00 | 435/366 | Gearhart, et al. | Human embryonic pluripotent germ cells |
| | Q | 6,200,806 | Jun 26/98 | Mar 13/01 | 435/366 | Thomson | Primate Embryonic Stem Cells |

Foreign Patent or Published Foreign Patent Application

| Examiner Initial | Ref. | Document No. | Publ. Date | Juris- diction | Title: | Translation |
|---------------------|------|-----------------|---------------|-------------------|---|-------------|
| | R | WO 97/32025 | Sep 4/97 | РСТ | Method for selective engraftment of drug-resistant hematopoietic stem cells | N/A |

| Examiner | Date Considered |
|----------|-----------------|
| | |

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. **Include copy of this form with next communication to applicant.** PTO-1449 — Page 1

| Form 1449 | (modified) | Docket: 096/006d | U.S.S.N. |
|-----------|--|---|-----------------------|
| | Information Disclosure Statement By Applicant | Title: Selected Antibody Targeting of Undiffe Inventors: McWhir, et al. | erentiated Stem Cells |
| | | Filing Date: March 26, 2004 | Group: |

Foreign Patent or Published Foreign Patent Application

| Examiner Initial | Ref. | Document No. | Publ. Date | Juris- diction | Title: | Translation |
|---------------------|------|-----------------|---------------|-------------------|--|-------------|
| | s | WO 98/39427 | Sep 11/98 | PCT | Gene therapy using bone marrow transplants transfected with therapeutic genes under the control of tissue-specific promoters | N/A |
| | Т | WO 99/10535 | Mar 4/99 | PCT | A process to study changes in gene expression in stem cells | N/A |
| | U | WO 99/19469 | Apr 22/99 | PCT | Porcine stem cells comprising a marker under an OCT-4 promoter | N/A |
| | ٧ | WO 99/20741 | Apr 29/99 | PCT | Methods and materials for the growth of primate- derived primordial stem cells | N/A |
| | w | WO 00/15764 | Mar 23/00 | PCT | Propagation and/or derivation of embryonic stem cells | N/A |

Other Documents

| Examiner Initial | Ref. | Author, Title, Date, Source |
|---------------------|------|--|
| | х | Amit, et al., Clonally Derived Human Embryonic Stem Cell Lines Maintain Pluripotency and Proliferative Potential for Prolonged Periods of Culture, Dev. Biol. 227:271 (2000) |
| | Υ | Auerbach, et al., Transplanted CNS stem cells form functional synapses in vivo, Eur. J. Neurosci. 12:1696 (2000) |
| | Z | Brustle, et al., Embryonic stem cell-derived glial precursors: a source of myelinating transplants, Science 285:754 (1999) |
| | AA | Galili, et al., Man Apes, and Old World Monkeys Differ from Other Mammals in the Expression of a-Galactosyl Epitopes on Nucleated Cells, J. Biol. Chem. 263:17755 (1988) |
| | AB | Inverardi, et al., Human natural killer lymphocytes directly recognize evolutionalrily conserved oligosaccharide ligands expressed by xenogeneic tissues, Transplantation 63:1318 (1997) |
| | AC | Klug, et al., Genetically selected cardiomyocytes from differentiating embryonic stem cells form stable intracardiac grafts, J. Clin. Invest. 98:216 (1996) |
| | AD | Schuldiner, et al., Effects of eight growth factors on the differentiation of cells derived from human embryonic stem cells, Proc. Natl. Acad. Sci. USA 97:11307 (2000) |
| | AE | Shamblott, et al., Derivation of pluripotent stem cells from cultured human primordial germ cells, Proc. Natl. Acad. Sci. USA 95:13726 (1998) |
| | AF | Thomson, Embryonic stem cell lines derived from human blastocysts, Science 282:1145 (1998) |
| | AG | Thomson, et al., Isolation of a primate embryonic stem cell line, Proc. Natl. Acad. Sci. USA 92:7844 (1995) |

| Examiner | Date Considered |
|----------|-----------------|
| | |

Form 1449 (modified)

Docket: 096/006d

U.S.S.N.:

SUPPLEMENTAL INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Title: Selective Antibody Targeting of Undifferentiated Stem Cells

Inventors: Jim McWhir, et al.

Filing Date: March 26, 2004

Group: 1632

U.S. PATENT DOCUMENTS

| Examiner Initial | Ref. | Document No. | Filing Date | Publication Date | Class/ Subclass | Inventors | Title |
|---------------------|------|-----------------|----------------|---------------------|--------------------|-----------|-------|
| | | | | | | | |

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

| Examiner Initial | Ref. | Document No. | Publication Date | Juris- diction | Title | Translation |
|---------------------|------|-----------------|---------------------|-------------------|---|-------------|
| | ВА | WO 99/45100 | Sep 10/99 | PCT | Embryonic or Stem-Like Cell Lines Produced by Cross-Species Nuclear Transplantation | N/A |
| | ВВ | WO 00/46355 | Aug 10/00 | PCT | Telomerase Reverse Transcriptase Regulatory Sequences | N/A |
| | ВС | WO 01/11011 | Feb 15/01 | PCT | Multipotent Adult Stem Cells and Methods for Isolation | N/A |
| | BD | WO 01/88104 | Nov 22/01 | PCT | Neural Progenitor Cell Populations | N/A |

OTHER DOCUMENTS

| Examiner Initial | Ref. | Author, Title, Source, Date |
|---------------------|------|-----------------------------|
| | | none |

| Examiner | Date Considered |
|----------|-----------------|
| | |

| Form 1449 | (modified) | Docket: 096/006d | U.S.S.N. | | | | |
|-----------|--|--|---|--|--|--|--|
| | Information Disclosure Statement By Applicant | Title: Selected Antibody Targeting Inventors: McWhir, et al. | Title: Selected Antibody Targeting of Undifferentiated Stem Cells Inventors: McWhir, et al. | | | | |
| | | Filing Date: March 26, 2004 | Group: | | | | |

U.S. Patent Documents

| Examiner Initial | Ref. | Patent No. | Filing Date | Issue Date | Class/ Subclass | Inventors: | Title: |
|---------------------|------|---------------|----------------|---------------|--------------------|-------------|--------|
| | CA | 6,146,888 | | Nov 2000 | 435/325 | Smith et al | |
| | СВ | 5,639,618 | | June 1997 | 435/7.21 | Gay et al. | |
| | | | | | , | | |

Foreign Patent or Published Foreign Patent Application

| Totality atom of a solution and a solution | | | | | | |
|--|------|-----------------|---------------|-------------------|---------|-------------|
| Examiner Initial | Ref. | Document No. | Publ. Date | Juris- diction | .Title: | Translation |
| (None) | | | | | | |

Other Documents

| Examiner Initial | Ref. | Author, Title, Date, Source |
|---------------------|------|-----------------------------|
| | | (None) |

| Examiner | Date Considered |
|----------|-----------------|
| | |